

MEMORANDUM

SRT-4J

DATE: May 12, 1998

SUBJECT: Review of the Addendums (6 and 7) to the QAPP for additional activities at

Blackwell Landfill, IL

FROM: L. Finkelberg, Chemist

Field Services Section (FSS)

TO: M. Bellot, RPM

I have reviewed the two Addendums (6 and 7) to the QAPP for additional activities at Blackwell Landfill, IL. These subject Addendums were received by FSS on April 29, 1998 (Log-in #2403).

Most of the US EPA previous comments, that were described in memorandum to the Addendum 5, are addressed in Addendum 6.

Deficiencies of the Addendum 6.

I. Project Description.

Please clarify whether Addendum 6 supersedes the Addendum 5; if Addendum 6 was prepared for a different activities (see Section 1.6.1 of Addendum and Table 3-2), that it was addressed in Addendum 5, than the following should be addressed: scope of work, sample network design and rationale, site maps showing sample locations, intended data use and project required detection limits for all analytical parameters. Table 1-3 was referenced for a summary of data generating activities, but table is not included in Addendum 6. If any of this information is addressed in QAPP or SOPs, please reference appropriate sections of the QAPP /SOPs.

II. Analytical procedures.

Please provide the laboratory SOPs for all analytical parameters, that are

Identified as project specific target parameters (SOPs for Chloride, CN, Hg, Sulfate, are missing).

Deficiencies for the Addendum 7 (Natural Attenuation Study).

The following information should be addressed in the provided document:

- 1. Project required Level of Analytical Quality Control Effort;
- 2. The project specific required detection limits for all analytical parameters;
- 3. Intended data use;
- 4. Please summarize the following: how many samples will be analyzed for additional laboratory parameters, sample containers, sample preservation and maximum holding time.

SOP for Nitrate-Nitrite determination.

Section 4 of the Addendum lists Nitrate as one of the additional parameters for groundwater analysis. The SOP, provided from the First Environmental laboratory, is for Nitrate+Nitrite determination. I do not see any reason to use the method that was provided by the laboratory. The SOP may be based on different EPA Method, that is sufficient to meet any defined project specific objectives (see comment above for Addendum 7).

- 1. The SOP for NO3 determination from First Environmental Laboratory is not acceptable. Please address the following:
 - a. The procedure of Nitrate reduction to Nitrite is not addressed.
 - b. The typo in Section "Summary of Method" such as Nitrate (NO2) needs to be corrected for (NO3).

.

c. Preparation of Nitrite standard solution should be addressed.

d. The initial calibration of the spectrophotometer is not addressed. How many standards will be used for calibration?

SOP for TOC in water.

The following needs to be addressed:

- 1. The range of measurement and the method detection limit should be addressed in SOP.
- 2. Please note, that sampling and storage of samples must be done in glass bottles without any headspace as this may contribute to loss of purgeable organics. Please correct the "Sample Preparation" item on page 2 of 5 of SOP.
- 3. What is the holding time for the TOC in aqueous samples?

SOP from Keystone Laboratory for Nitrate analysis in soil.

Please provide the following information:

- 1. The principle of the method;
- 2. Sample size;
- 3. What is the holding time and preservation for soil samples collected for Nitrate analysis?

SOP for TOC in soil determination.

Please follow the comments for TOC in water determination. The QC/QA information needs to be addressed in SOP.

SOP for Total Solids is a copy of the Method 160.3. Please address the QC information in terms of precision and accuracy.